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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,054	07/21/2003	Ivan H. Bekkers	O320.101.102	5932

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DICKE, BILLIG & CZAJA, P.L.L.C.  
FIFTH STREET TOWERS  
100 SOUTH FIFTH STREET, SUITE 2250  
MINNEAPOLIS, MN 55402

EXAMINER

OUELLETTE, JONATHAN P

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/624,054

Applicant(s)

BEKKERS, IVAN H.

Examiner

Jonathan Ouellette

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20040126</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 19-23 and 25-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

3. As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an

invention is eligible for a patent is to determine if the invention is within the "technological arts".

4. Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).
5. This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

6. In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.
7. The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under

the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

8. Claims **19-23 and 25-31** appear to be describing a method that is attempting to gather flight information, gather customer information, and provide pertinent flight information to customers. Thus, this process does not include a distinguishable apparatus, computer implementation, or any other incorporated technology, and would appear to be an attempt to patent an abstract idea not a “tangible” process and, therefore, non-statutory subject matter.
9. As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.
10. Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. **Claims 15-18 and 25-28** are rejected under 35 U.S.C. 102(e) as being anticipated by **Zirngibl et al. (US 6,836,537 B1).**

13. As per **independent Claims 15 and 25**, Zirngibl discloses a distribution system flight information to a plurality of customers, the distribution system comprising: a plurality of customer profiles, each customer profile storing a list of flight information requested by one of the plurality of customers (C7 L29-40); a file generator for generating a notification file of flight information for each of the plurality of customers based upon the customer profile corresponding to each of the plurality of customers; and a data distributor for selectively sending the notification files generated to the plurality of customers (C3 L55-67, C4 L1-55).

14. As per Claim 16, Zirngibl discloses wherein the file generator is configured to access flight information by accessing a data storage system, which stores flight information.

15. As per Claims 17 and 26, Zirngibl discloses wherein the plurality of customer profiles includes at least one designated file format for each of the plurality of customers.

16. As per Claim 18, Zirngibl discloses wherein the file generator is configured to generate the file for each of the plurality of customers in one of the respective file forma included in the plurality of customer profiles.
17. As per Claim 27, Zirngibl discloses wherein generating a file for each of the plurality of customer includes generating the notification file in the format provided in the customer profile.
18. As per Claim 28, Zirngibl discloses wherein selectively sending the notification files generated to the plurality of customer includes sending the generated notification files to the plurality of customers per the customer profiles.

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
20. **Claims 1-14, 19-24, and 29- 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zirngibl et al. (US 6,836,537 B1).**
21. As per **independent Claims 1,6, and 19**, Zirngibl discloses a flight information system comprising: a collection system including a collector for receiving flight information messages in a plurality of formats (C7 L41-48, C9 L51-58, C10 L54-67), and a

distribution system for selectively sending converted flight information to a customer (C3 L55-67, C4 L1-55).

22. Zirngibl fails to expressly disclose a translator for converting flight information messages in the plurality of formats received by the data collector into flight information in a common format.
23. However, Zirngibl does disclose receiving travel component information from a wide variety of sources (airlines, hotels, tickets, etc., C7 L41-48, C9 L51-58, C10 L54-67), and it was well known and common practice at the time the invention was made to convert data (translate) from multiple sources into one common language, into which to process the compiled data.
24. As per Claim 2, Zirngibl discloses wherein the distribution system includes a file generator a notification file containing a portion of the flight information as a specified in a customer profile, the distribution system being configured to send the file generated by the file generator to the customer.
25. As per Claim 3, Zirngibl discloses a data storage system having flight information received by the data collector and converted by the translator stored therein.
26. As per Claim 4, Zirngibl discloses a tracking system having a record of flight information received by the data collector.
27. As per Claim 5, Zirngibl discloses an error system for storing a record of errors detected in flight information received and for processing the detected errors (C19 L20-50).

28. As per Claim 7, Zirngibl discloses wherein the collector includes a push (alert) information collector configured to receive flight information messages from the plurality of suppliers.
29. As per Claim 8, Zirngibl discloses wherein the collector includes a pull (Input) information collector configured to periodically request and receive flight information messages from the plurality of suppliers.
30. As per Claim 9, Zirngibl discloses an authentication system for verifying flight information received by the collector was received from a valid supplier (inherent to flight information system).
31. As per Claims 10 and 20, Zirngibl discloses wherein the authentication system verifies flight information messages based upon a supplier profile, which designates at least one acceptable flight information message format for each of the plurality of suppliers.
32. As per Claims 11, 12, and 21, Zirngibl discloses a validation system for evaluating the syntax of the flight information messages received by the collector.
33. As per Claims 13 and 22, Zirngibl discloses wherein the collection system is adapted to update a storage system with flight information received by the collector.
34. As per Claims 14 and 23, Zirngibl discloses wherein the collection system is adapted to record flight information received to a transaction log.
35. As per Claim 24, Zirngibl discloses wherein storing a record of flight information received to a transaction log includes forwarding at least a portion of the transaction log to at least one of a billing system, a market analysis system, and a customer support system.

36. As per **independent Claim 29**, Zirngibl discloses a method for providing flight information to a customer, the method comprising: defining a customer profile (C7 L29-40) including a financial model (subscription) and a list of flight information requested by the customer under the financial model (C4 L50-55); receiving flight information received in a plurality of formats from a plurality of suppliers (C7 L41-48, C9 L51-58, C10 L54-67); distributing flight information to the customer based upon the customer profile; tracking flight information distribution (C3 L55-67, C4 L1-55); and billing the customer based upon the financial model and the flight information tracked (C31-22-30).
37. Zirngibl fails to expressly disclose translating the flight information received in a plurality of formats to a common format.
38. However, Zirngibl does disclose receiving travel component information from a wide variety of sources (airlines, hotels, tickets, etc., C7 L41-48, C9 L51-58, C10 L54-67), and it was well known and common practice at the time the invention was made to convert data (translate) from multiple sources into one common language, into which to process the compiled data.
39. As per Claim 30, Zirngibl discloses wherein the financial model includes a service level and a price for the service level (Billing Module, C31 L22-30).
40. As per Claim 31, Zirngibl discloses wherein the service level specifies the type and amount of flight information to be distributed to the customer.
41. As per **independent Claim 32**, Zirngibl discloses a computer-readable medium having computer executable instructions for performing a method for collecting flight information comprising: receiving flight information in a plurality of formats from a

plurality of suppliers (C7 L41-48, C9 L51-58); and storing the flight information in the common format to a data storage system (C10 L54-67).

42. Zirngibl fails to expressly disclose translating the flight information received in a plurality of formats to a common format.

43. However, Zirngibl does disclose receiving travel component information from a wide variety of sources (airlines, hotels, tickets, etc., C7 L41-48, C9 L51-58, C10 L54-67), and it was well known and common practice at the time the invention was made to convert data (translate) from multiple sources into one common language, into which to process the compiled data (create a database).

### *Conclusion*

44. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

45. The following foreign patent is cited to show the best foreign prior art found by the examiner:

**European Pat. No. EP 1037453 A2 to SIMEONOV et al.**

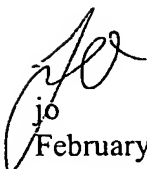
SIMEONOV discloses an enhanced flight messaging service for mobile phone users, which provides central access to current real time and location dependent flight information held in specialized databases

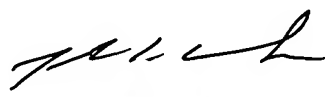
46. The following non-patent literature is cited to show the best non-patent literature prior art found by the examiner:

**“Smartray.com and Biztravel.com Strike Deal to Bring Travel Updates  
Directly to Cell Phone, Pdas and Pages,” PR Newswire, May 4, 2000.**

PR Newswire disclose a system used to gather user customer profiles and  
provide travel related information.

47. Additional Literature has been referenced on the attached PTO-892 form, and the  
Examiner suggests the applicant review these documents before submitting any  
amendments.
48. Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Jonathan Ouellette whose telephone number is (703) 605-  
0662 ((571) 272-6807 effective April 13, 2005). The examiner can normally be reached  
on Monday through Thursday, 8am - 5:00pm.
49. If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, John Weiss can be reached on (703) 308-2702. The fax phone numbers for  
the organization where this application or proceeding is assigned (703) 872-9306 for all  
official communications.
50. Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 306-5484.

  
jo  
February 18, 2005

  
JOHN G. WEISS  
SUPERVISOR/PATENT EXAMINER  
TECHNOLOGY CENTER 3600